

REMARKS

Reconsideration of the present application as amended is respectfully requested.

By means of the present amendment, the specification and claim 10 have been amended to correct certain informalities.

In the Office Action, claims 2-9, 11-18 and 20-27 were rejected under 35 U.S.C. §112, second paragraph as being indefinite due to an informality in claims 2, 11 and 20. In response, claims 2, 11 and 20 have been amended to overcome the informality noted by the Examiner. It is respectfully submitted that the rejection of claims 2-9, 11-18 and 20-27 have been overcome and an indication as such is respectfully requested. The claims were not amended in order to address issues of patentability and Applicants respectfully reserve all rights they may have under the Doctrine of Equivalents.

In the Office Action, claims 1-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over International Patent Application Publication No. WO 00/72540 (Ariyavistakul). In response, the following remarks are presented and new claims 28-30 have been added. It is respectfully submitted that claims 1-30 are patentable over Ariyavistakul for at least the following reasons.

Ariyavistakul is directed to equalization techniques for communication systems using orthogonal signaling. As recited on page 6, first full paragraph, in connection with FIG 3:

However, if chip #7 of the current CCK symbol is being equalized, the receiver needs to use the sliced output of the DFE corresponding to chips #0 to #6 of the current CCK symbol to perform ICI cancellation. Therefore, this technique is still affected by chip decision errors ... (Emphasis added)

In stark contrast, the present invention as recited in independent claims 1, 10 and 19 requires:

wherein decisions on a symbol chip at a particular time are not made until an entire CCK codeword that the chip belongs to is decoded, thereby reducing errors propagated when decoding said symbols. (Emphasis added)

This feature is not taught or suggested in Ariyavistakul. Ariyavistakul solves problems associated with chip decision errors by passing the output of the DFE through a soft decision functionality 40, as recited on page 7, lines 5-6. As further recited on page 7, last two lines, to page 8, line 1:

An optimum approach for computing soft decision involves averaging all possible values of the transmit symbols at time n. (Emphasis added)

There is no teaching or suggestion in Ariyavistakul of not making decisions on a symbol chip at a particular time are until an

entire CCK codeword that the chip belongs to is decoded, as recited in independent claims 1, 10 and 19.

Further, Ariyavistakul does not even teach or suggest a trellis decoder or structure, let alone the particular trellis decoder/structure recited in claims 28-30, namely that:

the CCK decoder includes a trellis decoder having a number of trellis paths, wherein said number of trellis paths is less than all possible states of said entire CCK codeword that the chip belongs to. (Emphasis added)

The above-noted features recited in independent claims 1, 10 and 19, as well as in dependent claims 28-30 are nowhere taught or suggest in Ariyavistakul.


Accordingly, it is respectfully submitted that independent claims 1, 10 and 19 should be allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-9, 11-18 and 20-30 should also be allowed at least based on their dependence from independent claims 1, 10 and 19, as well as for the separately patentable elements contained in each of the dependent claims.

In addition, Applicant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Applicant reserves the right to submit further arguments in support of the above stated position as

well as the right to introduce relevant secondary considerations including long-felt but unresolved needs in the industry, failed attempts by others to invent the invention, and the like, should that become necessary.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 
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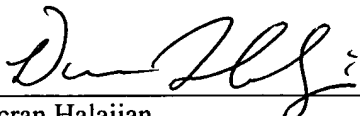
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